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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/511,139	10/14/2004	Jun Fujita	121510	1973	
	7590 10/30/2007		EXAM	INER	
P.O. BOX 3208	. —		121510 1973  EXAMINER  MAYES, MELVIN C  ART UNIT PAPER NUMBER  1791	MAYES, MELVIN C	
ALEXANDRIA	A, VA 22320-4850		121510 1973  EXAMINER  MAYES, MELVIN C  ART UNIT PAPER NUMBE  1791  MAIL DATE DELIVERY MOI	PAPER NUMBER	
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			10/30/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Commons	10/511,139	FUJITA, JUN				
Office Action Summary	Examiner	Art Unit				
	Melvin Curtis Mayes	1791				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 13 Au	iaust 2007					
	action is non-final.					
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E						
Disposition of Claims						
4)⊠ Claim(s) <u>8-19</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>8-19</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r		÷			
10) The drawing(s) filed on is/are: a) acce		Examiner.				
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct						
11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents						
2. Certified copies of the priority documents		•				
<ol> <li>Copies of the certified copies of the prior application from the International Bureau</li> </ol>		a in this National Stage				
* See the attached detailed Office action for a list		ad				
See the attached detailed Office action for a list	of the defined copies not receive	; <b>u</b> .				
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Attachment(s)	A) []	(PTO 412)				
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)	ate				
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal F 6) Other:	atent Application				
Paper No(s)/Mail Date	o) 🔲 Other					

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

(1)

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(2)

Claims 8-19 are rejected under 35 U.S.C. 103(a) as obvious over Bonzo 4,557,773 in view of Gipson 4,646,914 and 3M Technical Data Sheets for "Scotch" transparent polyester tape No 9390 and No. 9391.

Bonzo discloses a method of fabricating a honeycomb structure comprising: providing an extruded ceramic honeycomb structure; securing a solid covering film to the end face of the honeycomb; forming openings in the film by sources such as laser or intense light; plugging cells in the honeycomb with ceramic cement; and firing the structure and cement. The solid covering film can be masking tape such as one mil thick (0.025 mm, 25  $\mu$ m) polyester film such as Scotch Brand Magic Transparent Tape (col. 7, line 3 – col. 11, line 22).

Gipson teaches that Scotch Brand tape having polyester film tape has an acrylic adhesive (col. 2, lines 51-53).

3M Technical Data Sheet for "Scotch" transparent polyester tape No 9390 teaches that a tape of 0.025 mm thick transparent polyester film has acrylic adhesive of thickness of 0.025 mm and JIS adhesive force of 3.92 N/cm (approximately 10 N/25 mm).

3M Technical Data Sheet for "Scotch" transparent polyester tape No 9391 teaches that a tape of 0.016 mm thick transparent polyester film has acrylic adhesive of thickness of 0.006 mm and JIS adhesive force of 2.15 N/cm (approximately 5 N/25 mm).

By providing the masking tape as Scotch Brand tape with polyester film (backing), the tape is provided with an acrylic adhesive because Scotch Brand transparent tapes with transparent polyester film use acrylic polymer for the adhesive, as taught by Gipson and 3M Technical Data Sheets for "Scotch" transparent polyester tapes.

By providing the Scotch Brand transparent tape of 0.025 mm thick polyester film and acrylic adhesive, the tape provided obviously has an adhesive force (as measured in accordance with JIS Z0237) of about 5 or 10 N/25 mm, as 3M Technical Data Sheet for "Scotch" transparent polyester tape No 9390 and 9390 teaches that a tape of total thickness of 0.022 (No. 9391) has a JIS adhesive force of approximately 5 N/25 mm while a tape with 0.025 mm thick polyester film with acrylic adhesive has a JIS adhesive force of approximately 10 N/25 mm. While it is not clear whether "one mil thick (0.001 inch or 0.025 mm) polyester film" in Bonzo refers to the total thickness of the tape or only to the thickness of the polyester film of the tape, in either case, the JIS adhesive force of the tape is within the claimed ranges of 3-15 N/25 mm, 10-15 N/25 mm and 5-11 N/25 mm, as taught by 3M Technical Data Sheets for tape of total thickness of 0.022 mm and tape of polyester film thickness of 0.025 mm. By providing either the tape of total thickness of 0.025 mm (25  $\mu$ m with acrylic adhesive thickness of about 6  $\mu$ m) or the polyester film of thickness of 0.025 mm (25  $\mu$ m with acrylic adhesive thickness of about 25  $\mu$ m) as taught by 3M Technical Data Sheets, the total thickness is within the range of 10-70  $\mu$ m, the thickness

of the substrate is within in the range of 5-40  $\mu$ m and the thickness of the acrylic adhesive is within the range of 5-40  $\mu$ m, as claimed in Claims 10-13.

### Response to Amendment

(3)

The Declaration under 37 CFR 1.132 filed August 13, 2007 is insufficient to overcome the rejection of claims 8-19 based upon over Bonzo 4,557,773 as set forth in the last Office action because:

- 1) The evidence submitted is not commensurate in scope with the claims. The claims are limited to film comprising a substrate layer and an adhesive layer and having an adhesive force of 3-15 N/25mm. There is no evidence that the film in the experiment has an adhesive layer and adhesive force of 3-15 N/25mm commensurate in scope with the claims.
- 2) The evidence submitted is not commensurate in scope with the claims. The evidence submitted allegedly shows a difference in loss of plugging material after peeling the film after drying the plugging material. However the claimed invention is not limited to peeling the film after drying the plugging material but encompasses burning away the film during firing of the honeycomb and plugging material. The evidence does not also show the alleged criticality of using laser beam versus boring needle when the film is burnt away during firing as encompassed by the claimed invention.
- 3) The closest prior art has not been compared with the claimed subject matter. The evidence submitted compares making holes with a needle by press-bending process which cuts and bends the film inward in the cell versus making holes by laser beam. The process of Bonzo

preferably uses a heated probe element which melts the adhesive tape or applies heat by other sources such as laser or intense light. The evidence submitted does not compare making holes by a heated probe element to melt the film, preferable in Bonzo, to making holes by laser beam which also melts the film.

### Conclusion

(4)

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin Curtis Mayes whose telephone number is 571-272-1234. The examiner can normally be reached on Mon-Fri 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Phillip C. Tucker can be reached on 571-272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melvin Curtis Mayes Primary Examiner Art Unit 1791

MCM October 26, 2007